

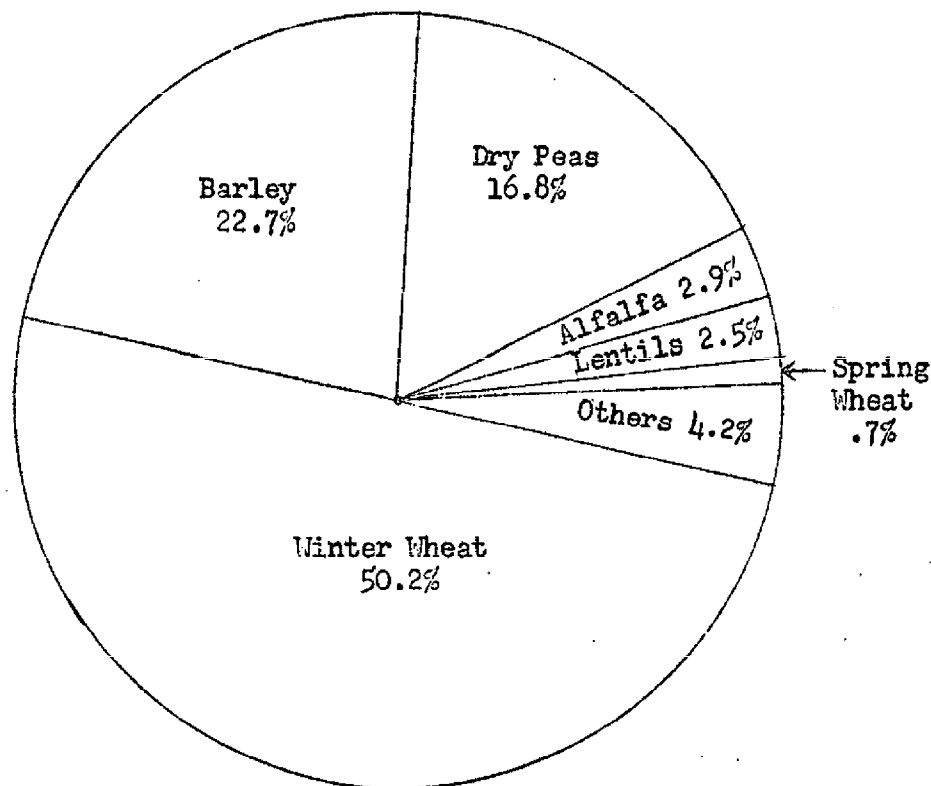
PART V

CROPS

Major Crops

According to the Census of Agriculture, harvested cropland in Whitman County amounted to 669,672 acres in 1959. Whitman's cropland accounted for about 15 percent of the state total in that year. An overwhelming proportion of the county's cropland is devoted to small grains, principally winter wheat and barley under dryland farming. Other important crops are dry peas, hay and lentils.

Wheat is the dominant crop in Whitman County. In 1964, wheat was harvested from about 346,600 acres. The second ranking small grain in terms of acreage is barley. Barley was produced on an estimated 91,000 acres in 1964. Dry peas also is among the leading crops in the county. According to the latest Census of Agriculture, there were 112,438 acres of this crop in 1959 which accounted for about 63 percent of the state total. Alfalfa is the most important hay crop in the county. In 1962, alfalfa was grown on 18,900 acres. Whitman County grows most of the state's lentils. In 1959, there were 16,938 acres of lentils in the county which represented about three-fourths of the state acreage.



Source: U. S. Census of Agriculture, 1959

Figure 10. Percent Of Total Cropland In Leading Crops
Whitman County, 1959

Crop Trends

A number of changes are apparent in the emphasis Whitman County farmers have given to leading crops. These show the influence of market outlets and improved facilities for the distribution and storage of farm products. They also reflect technological advances in agriculture and government programs. New food processing methods have affected the acreages of various crops. Indeed, changes of crop patterns have resulted from the farmer's own initiative in experimentation with different crops and types of farming. Whitman County agriculture through specialization and intensification has become increasingly more valuable to the regional economy.

Small Grains: Wheat, Barley, Oats and Rye

Pioneer farmers early discovered that the soils, terrain and climate of eastern Washington were ideal for growing grains. Soils of the Palouse Hills not only are fertile but are highly retentive of moisture, an important factor in dry-land farming. Whitman County grain farmers have taken full advantage of the area's rich resources of soils and climatic conditions. Modern machinery and improved farming practices have aided the farmers to make the county one of the richest grain producing areas in the world.

Wheat

Wheat is the major crop in Whitman County both in terms of acreage and value. Since the pioneer period, wheat has been the principal crop of the area. Wheat fields in the county cover most of the Palouse Hills and also some sections of the Channelled Scablands. According to the Census of Agriculture, Whitman County ranked first among all the counties in the United States in wheat acreage and production in 1959. In 1964, 346,600 acres of county land were devoted to wheat and production was 15,837,600 bushels. Whitman contained about 17 percent of the state acreage of wheat and accounted for over 19 percent of Washington's total wheat production in 1964.

Most of the wheat grown in the county has been winter wheat. Winter wheat has been preferred over spring wheat because of higher yields and because moisture conditions favor fall-seeded grain. A substantial acreage of spring wheat generally is on land first seeded to winter wheat. Fields of winter wheat that have been damaged by winterkill, other climatic conditions or erosion are generally reseeded to spring wheat.

Since 1939, the county wheat acreage has ranged between a high of 531,200 acres in 1953 and the low of 286,000 acres in 1943. Between 1939 and 1953, the overall trend in wheat acreage was upward. When the Federal wheat acreage allotment program was initiated in 1954, land in wheat dropped from 531,000 acres in the previous year to 370,000 acres. Since then, acreage has remained below 350,000 acres in the county.

Winter wheat has dropped from a high of 456,000 acres in 1949 to 336,000 acres in 1964. Harvested acres of spring wheat has ranged from as little as 2,400 acres in 1958 to as much as 160,400 acres in 1953. Wide variations in the spring wheat acreage result from the fact that much of the wheat seeded in the spring is done so only when there has been extensive damage to the winter wheat crop or when conditions in the fall were unfavorable to planting. In 1964, 336,000 acres of

winter wheat produced 15,456,000 bushels for an average yield per acre of 46 bushels. In comparison, only 10,600 acres of spring wheat were harvested which produced 381,600 bushels--a yield of 36 bushels per acre.

Table 15. Winter Wheat and Spring Wheat
Whitman County, 1939-1964

Year	Winter Wheat			Spring Wheat		
	Harvested Acres	Yield (Bushels Per Acre)	Production (Bushels)	Harvested Acres	Yield (Bushels Per Acre)	Production (Bushels)
1939	293,000	31.6	9,259,000	69,000	25.9	1,787,000
1940	280,000	32.3	9,032,000	98,000	23.0	2,250,000
1941	339,000	33.2	11,255,900	32,000	25.2	806,000
1942	278,000	34.3	9,531,000	10,500	28.0	294,000
1943	125,600	29.0	3,642,000	160,400	31.1	4,985,000
1944	275,700	35.4	9,759,000	104,500	30.7	3,212,000
1945	309,800	33.2	10,284,500	82,000	24.6	2,017,500
1946	394,500	36.5	14,399,200	28,000	30.6	856,800
1947	388,000	30.8	11,969,000	57,000	21.0	1,197,000
1948	430,000	31.5	13,545,000	40,000	20.2	808,000
1949	456,000	27.5	12,540,000	37,000	21.5	795,500
1950	400,000	35.5	14,200,000	49,300	27.0	1,331,100
1951	325,000	37.5	12,187,500	126,000	26.0	3,276,000
1952	428,000	38.5	16,478,000	39,000	26.0	1,014,000
1953	419,000	35.5	14,874,500	112,200	27.5	3,085,500
1954	356,000	42.5	15,130,000	14,000	34.0	476,000
1955	333,200	38.0	12,661,600	6,700	23.0	154,100
1956	280,000	37.5	10,500,000	59,000	36.0	2,124,000
1957	313,600	46.5	14,582,400	5,000	44.0	220,000
1958	329,600	41.0	13,513,600	2,400	21.5	51,600
1959	336,000	50.5	16,968,000	4,100	42.0	172,200
1960	341,000	41.5	14,151,500	3,600	27.0	97,200
1961	270,500	33.0	8,926,500	3,800	24.0	91,200
1962	288,800	46.0	13,284,800	6,200	40.5	251,100
1963	333,000	47.0	15,651,000	16,800	31.0	520,800
1964	336,000	46.0	15,456,000	10,600	36.0	381,600

Source: Statistical Reporting Service, U.S.D.A.

According to the Census of Agriculture, a total of 1,523 farms reported growing winter wheat in Whitman County in 1959. Over three-fourths of these farms harvested more than 100 acres of winter wheat each. In the same year, spring wheat was reported grown by 77 farms, of which only 14 harvested more than 100 acres.

Whitman County farmers have experimented with several varieties of wheat in order to obtain greater yields. In 1964, Gaines was the leading variety grown in the county, representing 81 percent of the total production. Omar was second with 9.0 percent of the quantity harvested during the year.

Table 16. Estimated Wheat Production by Varieties
Whitman County, 1964-1963-1962

Variety	1964 Bushels	1964 %	1963 %	1962 %
<u>Common White</u>	14,395,300	90.9	82.2	77.5
Gaines	12,771,500	80.6	47.7	0.9
Brevor	689,800	4.4	22.8	63.1
Burt	530,200	3.3	8.3	10.5
Idaed	72,300	0.5	3.1	1.0
Federation	280,900	1.8	0.2	0.5
Golden	15,500	0.1	0.1	1.1
Marfed	28,400	0.2	TR.	0.4
Requa	6,700	TR.	--	--
<u>White Club</u>	1,424,300	9.0	17.6	22.3
Omar	1,420,100	9.0	17.4	21.7
Elmar	--	--	0.1	0.6
Elgin	4,200	TR.	0.1	TR.
<u>Hard Red Winter</u>	18,000	0.1	0.1	0.2
Turkey-Rio	--	--	0.1	0.2
Ridit	1,800	TR.	TR.	TR.
Cheyenne	6,200	0.1	--	TR.
<u>Soft Red Winter</u>	--	--	TR.	TR.
Triplett	--	--	TR.	TR.
Total All Classes	15,837,600		16,171,800	13,535,900

Source: Statistical Reporting Service, U.S.D.A.

Barley

Barley is the second ranking crop in the county in terms of acreage. According to the Census of Agriculture, Whitman ranked eleventh among all United States counties in barley acreage and was third in quantity harvested in 1959. Since 1954, farmers have increased their acreages of barley on lands taken out of wheat because of the Federal wheat acreage allotment program. Barley in Whitman County jumped from 33,000 acres in 1953 to 144,000 acres in 1954. Since 1954, the acreage has ranged between 169,500 to 91,000 acres. Yields have varied from a low of 31 bushels per acre in 1955 to a high of 53 bushels per acre in 1964 since the allotment program was initiated. In 1964, 4,854,400 bushels of barley were harvested from 91,000 acres in the county. Whitman was the leading barley county in the state both in acreage and production in 1964.

According to the Census of Agriculture, a total of 1,294 farms reported growing barley in Whitman County in 1959. About 45 percent of these farms harvested more than 100 acres of barley. The distribution pattern of barley follows closely that of wheat in the county.

Table 17. Wheat and Barley: Acreage, Yield and Production
Whitman County, 1939-1964

Year	All Wheat			Barley		
	Harvested Acres	Yield (bushels per acre)	Production (bushels)	Harvested Acres	Yield (bushels per acre)	Production (bushels)
1939	362,000	30.5	11,046,000	34,600	34.0	1,176,400
1940	378,000	29.8	11,282,000	52,000	31.0	1,610,800
1941	371,000	32.5	12,061,900	59,000	37.0	2,183,000
1942	288,500	34.1	9,825,000	115,000	42.0	4,830,000
1943	286,000	30.2	8,627,000	96,000	42.0	4,032,000
1944	380,200	34.1	12,971,000	73,000	39.0	2,847,000
1945	391,800	31.4	12,302,000	41,000	37.0	1,517,000
1946	422,500	36.1	15,256,000	34,000	39.5	1,343,000
1947	455,000	29.6	13,166,000	43,000	30.0	1,290,000
1948	470,000	30.5	14,353,000	57,000	33.0	1,881,000
1949	493,000	27.0	13,335,500	39,200	27.5	1,078,000
1950	449,300	34.6	15,531,000	67,000	37.0	2,479,000
1951	451,000	34.3	15,463,500	30,000	37.0	1,110,000
1952	467,000	37.5	17,492,000	33,000	34.0	1,122,000
1953	531,200	33.8	17,960,000	33,000	36.5	1,204,000
1954	370,000	42.2	15,606,000	144,000	48.0	6,915,000
1955	339,900	37.7	12,815,700	135,000	31.0	4,803,000
1956	339,000	37.2	12,624,000	124,000	41.3	5,119,500
1957	318,600	40.5	14,802,400	169,500	47.0	7,966,500
1958	332,000	40.9	13,565,200	166,700	37.1	6,186,100
1959	340,100	50.4	17,140,200	158,000	45.3	7,156,000
1960	344,600	41.3	14,248,700	134,600	42.5	5,720,500
1961	347,900	31.9	11,102,400	146,500	44.1	6,458,500
1962	295,000	45.9	13,535,900	127,000	52.0	6,604,000
1963	349,800	46.2	16,171,800	134,000	46.1	6,176,000
1964	346,600	45.7	15,837,600	91,000	53.3	4,854,400

Source: Statistical Reporting Service, U.S.D.A.

Oats and Rye

Since 1939, the trend in Whitman County's oats acreage has been downward. Oats have been the traditional feed crop for horses and the decline in acreage is largely the result of farm mechanization and the reduction of the horse population. There was an increase in acreage during the mid-1950's but it was far below the levels set in the 1930's and early 1940's. Some land formerly in wheat was put into oats after 1954. In 1962, there were 6,000 acres of oats in the county compared with 19,000 acres in 1955 and 32,000 acres in 1939. Whitman ranked fifth in the state in oats acreage in 1962.

Oats yields have varied from an average of 35 bushels per acre to 62 bushels per acre in the county since 1939. In 1962, 366,000 bushels were harvested from 6,000 acres for an average yield per acre of 61 bushels. Whitman ranked sixth in the state in oats production in 1962.

According to the Census of Agriculture, a total of 382 farms reported growing oats in Whitman County in 1959. Oats acreages are scattered throughout the county

except in the western portion and along the southern border.

Rye is a minor crop in Whitman County. Acreage has ranged from as little as 10 acres to about 1,400 acres in the county since 1939. In 1962, only 6,000 bushels were harvested from a total of 200 acres.

Table 18. Oats and Rye: Acreage, Yield and Production
Whitman County, 1939-1962

Year	Oats			Rye		
	Harvested Acres	Yield (bushels per acre)	Production (bushels)	Harvested Acres	Yield (bushels per acre)	Production (bushels)
1939	32,000	40.0	1,280,000	300	21.0	6,300
1940	27,800	38.0	1,055,900	510	21.6	11,000
1941	23,600	35.0	826,000	710	17.0	12,100
1942	28,100	50.0	1,391,000	470	28.1	13,200
1943	26,400	45.0	1,188,000	300	29.0	8,700
1944	19,000	48.0	912,000	10	19.0	190
1945	17,000	50.0	850,000	20	22.0	440
1946	11,400	49.5	564,300	20	20.0	400
1947	11,400	47.5	541,500	30	18.3	550
1948	9,200	45.5	418,600	30	20.7	620
1949	10,500	44.5	467,200	30	17.3	520
1950	13,000	57.5	747,500	70	15.1	1,060
1951	10,600	49.5	524,700	110	17.0	1,870
1952	10,000	51.5	515,000	170	12.4	2,100
1953	9,400	51.0	479,400	220	19.1	4,200
1954	14,500	61.5	891,800	210	20.0	4,190
1955	19,000	38.5	731,500	270	30.0	8,100
1956	15,900	49.0	779,100	350	11.5	4,020
1957	16,300	55.0	896,500	1,000	34.5	34,500
1958	13,600	39.0	530,400	900	20.5	18,450
1959	12,600	52.0	655,200	1,400	23.5	32,900
1960	11,000	45.5	500,500	910	32.1	29,210
1961	12,500	45.0	562,500	300	30.0	9,000
1962	6,000	61.0	366,000	200	30.0	6,000

Source: Statistical Reporting Service, U.S.D.A.

Dry Field and Seed Peas

As early as the first World War period, some dry peas were grown in the county. The production of dry peas was of minor importance, however, until about the middle of the 1930's. During the 1930's, the production of dry peas became an important enterprise in the eastern part of the county where the annual rainfall is around 20 inches or more. The importance of the dry pea enterprise was increased greatly during World War II when the competitive price of peas made this crop even more profitable than winter wheat.

For a short time, peas were grown after peas in the rotation, in some cases for as many as three years consecutively. The annual cropping with dry peas as an alternate crop in the rotation pushed to the west in the county during the war

period because of the high price for peas and the higher than normal rainfall which occurred. By 1949, the production of dry peas decreased to about one-third of the war-time peak. In 1959, 163,679,053 pounds were harvested from a total of 112,438 acres on 651 farms. Whitman is by far the leading dry peas county in the state. In 1959, it produced 60 percent of the state's dry peas.

Dry peas have become increasingly popular in the crop rotation plans of grain farmers. As an annual legume, peas are grown to restore soil nitrogen and control erosion as well as to act as a cover and green manure crop. On many wheat farms, they are a replacement of summerfallow. White Canadian and Alaska are the most popular spring-seeded field pea varieties, accounting for most of the peas grown. Peas are raised for human food, seed and livestock feed.

Table 19. Dry Peas: Acreage, Yield and Production
Whitman County, 1944-1959

Year	Dry Peas		
	Harvested Acres	Yield (pounds per acre)	Production (pounds)
1944	218,309	1,356	295,954,900
1949	126,748	783	99,265,377
1954	73,315	1,374	100,712,831
1959	112,438	1,456	163,679,053

Source: U. S. Census of Agriculture

Hay Crops

Hay forms the third major crop grown in Whitman County after grains and dry peas. The amount of land devoted to hay in the county has declined since 1920. In 1920, land from which hay was cut amounted to 45,000 acres compared with 28,800 acres in 1959.

Among the hay crops grown in Whitman County, alfalfa is the most important. In 1959, about 68 percent of the total land in hay was devoted to alfalfa on 731 farms. Alfalfa has ranged between 27,000 and 15,000 acres in the county since 1939. In 1962, about 45,400 tons of alfalfa was cut from 18,900 acres in the county representing a yield of 2.6 tons per acre. According to the Census of Agriculture, approximately a quarter of the total alfalfa crop in 1959 was sold off the farm. Alfalfa is grown throughout the agricultural areas of the county.

Other hay crops are relatively minor. Whitman County's acreage of clover and timothy hay has increased over the last quarter century. It reached a high of 3,200 acres in 1956. Since then, the acreage has fluctuated, dropping to around 2,000 in 1962. About 3,200 tons were harvested in the county in 1962.

Census of Agriculture showed 185 county farms reporting clover-timothy hay in 1959. Most of the clover-timothy is produced in the eastern part of the county. The acreage of small grain cut for hay in the county has declined greatly since the 1920's. In 1959, these grains--wheat, barley, oats and rye--cut for hay amounted to 2,717 acres. Grass silage, on the other hand, has increased in importance in the county. Acreage in grass silage increased from 54 in 1949 to 804 in 1954 and 1,411 in 1959. The amount of land from which other hay has been cut totaled 2,723 acres in 1954 and 2,065 in 1959.

Table 20. Alfalfa Hay and Clover-Timothy Hay
Acreage, Yield and Production
Whitman County, 1939-1962

Year	Alfalfa Hay			Clover and Timothy Hay		
	Harvested Acres	Yield (Tons Per Acre)	Production (Tons)	Harvested Acres	Yield (Tons (Per Acre)	Production (Tons)
1939	23,200	1.5	34,800	1,140	1.7	1,970
1940	24,100	1.9	46,900	1,530	1.1	1,750
1941	26,400	1.9	50,200	1,800	1.6	2,850
1942	25,600	1.9	49,000	1,770	2.0	3,620
1943	24,800	3.6	89,200	1,460	1.5	2,250
1944	23,900	1.6	38,300	1,300	1.5	1,900
1945	22,200	1.8	40,000	1,420	1.5	2,100
1946	18,700	2.0	36,700	1,520	1.6	2,400
1947	17,600	1.8	31,000	1,660	1.5	2,560
1948	15,900	2.6	41,900	1,720	1.6	2,750
1949	15,600	1.7	26,000	2,080	1.5	3,140
1950	16,000	1.8	28,800	1,880	2.5	4,700
1951	19,500	1.8	35,300	1,940	2.5	4,850
1952	19,900	2.0	39,800	2,420	1.7	4,100
1953	20,800	1.9	40,600	2,950	2.1	6,200
1954	20,900	2.2	45,800	2,510	1.5	3,800
1955	23,300	2.0	46,600	2,690	1.4	3,900
1956	27,000	2.3	62,100	3,200	1.8	5,800
1957	26,600	2.3	61,100	2,000	1.5	3,000
1958	23,400	2.2	50,300	2,500	1.5	3,700
1959	20,000	2.1	42,000	2,900	1.6	4,600
1960	18,000	2.2	39,000	2,800	1.6	4,400
1961	19,200	1.9	35,700	2,100	1.6	3,400
1962	18,900	2.4	45,400	2,000	1.6	3,200

Source: Statistical Reporting Service, U.S.D.A.

Lentils

Lentil production is an increasingly important farm enterprise in Whitman County. Whitman is by far the leading lentil producing county in the state. In 1959, 172 farms reported harvesting 12,827,898 pounds of lentils from a total of 16,938 acres. The county production accounted for about 79 percent of the state total in that year.

Field Seed Crops

Field seed crops are an important specialty in Whitman County. In 1959, 5 farms reported having 1,007 acres in Merion bluegrass from which 195,800 pounds of seed were harvested. The county accounted for about 18 percent of the state Merion bluegrass seed production in that year.

In 1959, wheatgrass seed amounting to 131,200 pounds was also harvested in the county from 704 acres on 14 farms. Other field seed crops in 1959 included 120 acres of alfalfa seed, 115 acres of red fescue seed, 10 acres of tall fescue seed and 8 acres of red clover seed. Production during the year was as follows:

18,000 pounds of alfalfa seed, 58,500 pounds of red fescue seed, 1,000 pounds of tall fescue seed and 793 pounds of red clover seed.

Vegetables

According to the Census of Agriculture, there were 1,008 farms in Whitman County which harvested vegetables for home use only in 1959. In the same year, 18 farms in the county harvested a total of 1,100 acres of vegetables for sale. Commercial vegetable acreage has been increasing in the county since World War II. In 1944, there were only 60 acres of vegetables harvested for sale. Most of the commercial vegetable acreage has been in green peas. In 1959, about 98 percent of vegetables harvested for sale was in green peas.

Tree Fruits

Land in bearing and nonbearing fruit orchards amounted to about 414 acres on 47 farms in Whitman County in 1959. The county's fruit industry has been declining since the turn of the century. Apples and prunes were most important in the county around 1900. More recently, peaches and apricots have become the main fruits produced in the area. Many of the fruit trees are harvested for home use only. Commercial orchards are found in the steep-sloped farmlands and terraces of the Snake River Canyon on the southern margin of the county.

Table 21. Fruit Trees of Bearing Age
Whitman County, 1900-1959

Year	Apple	Pear	Peach	Cherry	Plum & Prune	Apricot
1900	381,611	52,116	38,520	21,748	106,950	4,820
1910	267,768	20,650	50,817	22,966	49,445	4,110
1920	124,139	10,156	36,613	17,104	28,446	669
1930	41,147	7,287	25,909	9,684	13,747	6,292
1940	7,442	2,187	28,609	4,373	1,433	9,638
1950	5,251	2,233	17,302	3,765	1,732	6,539
1954	1,143	1,085	7,833	1,013	170	2,649
1959	932	1,151	11,696	151	60	2,647

Source: U. S. Census of Agriculture

Potatoes

Potatoes have declined as a commercial crop in Whitman County. In 1920, there were over 2,500 acres compared with an estimated 50 acres in 1962. The Census of Agriculture counted 258 farms with potatoes for home use or for sale in 1959 compared with 728 in 1954. Potatoes are grown in the west-central part of the county.

Table 22. Number of Farms, Land in Farms and Value of Livestock and Crops Sold Off Farms, Washington Counties - 1959

County	Number of Farms	All Land in Farms (acres)	Value of all Crops Sold Off Farms (dollars)	Value of all Livestock and their Products Sold Off Farms (dollars)
Adams	786	1,076,960	21,055,532	3,547,300
Asotin	325	364,405	2,589,582	1,179,464
Benton	1,281	562,809	12,912,165	3,958,996
Chelan	1,636	215,646	16,877,563	660,083
Clallam	724	68,739	706,055	2,858,512
Clark	2,778	188,479	3,020,725	8,222,499
Columbia	333	359,134	9,778,027	1,148,786
Cowlitz	1,014	80,176	1,022,291	2,808,884
Douglas	935	1,012,561	12,985,276	1,067,743
Ferry	283	298,247	396,384	931,057
Franklin	742	590,027	10,305,160	3,596,711
Garfield	274	344,094	6,871,789	898,109
Grant	1,497	1,075,612	26,083,038	12,555,694
Grays Harbor	896	99,529	924,067	2,639,777
Island	493	38,702	515,863	1,909,572
Jefferson	266	35,123	212,568	758,107
King	2,952	114,719	6,240,212	14,298,190
Kitsap	906	29,776	437,819	1,374,547
Kittitas	905	580,035	2,961,833	10,945,370
Klickitat	741	960,614	3,859,102	3,083,797
Lewis	2,230	255,012	1,893,636	7,935,581
Lincoln	959	1,422,981	21,035,259	3,253,383
Mason	328	35,518	202,594	728,250
Okanogan	1,762	2,048,406	10,681,584	5,723,537
Pacific	499	53,348	819,224	1,086,617
Pend Oreille	366	124,239	265,001	1,222,488
Pierce	2,535	153,363	4,928,685	10,850,000
San Juan	209	45,707	91,694	595,403
Skagit	1,740	141,770	6,722,958	9,167,984
Skamania	177	20,177	283,595	259,736
Snohomish	2,919	148,604	2,788,695	12,899,240
Spokane	2,990	822,008	15,091,158	8,403,816
Stevens	1,608	802,776	3,836,457	5,676,015
Thurston	1,220	142,170	1,952,408	5,836,930
Wahkiakum	302	26,299	174,415	1,052,642
Walla Walla	981	822,729	19,957,499	4,228,801
Whatcom	3,151	185,045	3,943,630	17,706,625
WHITMAN	1,824	1,485,709	43,632,434	7,398,484
Yakima	6,010	1,884,694	75,760,207	32,919,536
State Total	51,577	18,716,972	353,816,184	215,388,266

Source: U. S. Census of Agriculture, 1959.